

[illegible]

Disclosed are constructs comprising sequences encoding 3-hydroxy-3methylglutaryl-Coenzyme A reductase and at least one other sterol synthesis pathway enzyme. Also disclosed are methods for using such constructs to alter sterol production and content in cells, plants, seeds and storage organs of plants. Also provided are oils and compositions containing altered sterol levels produced by use of the disclosed constructs. Novel nucleotide sequences useful in the alteration of sterol production are also provided. Also provided are cells, plants, seeds and storage organs of plants comprising sequences encoding 3-hydroxy-3methylglutaryl-Coenzyme A reductase, at least one other sterol synthesis pathway enzyme and at least one tocopherol synthesis enzyme.